

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/714,865DATE: 12/01/2000
TIME: 13:28:55Input Set : A:\B8017195.txt
Output Set: N:\CRF3\12012000\I714865.raw

ENTERED

```
4 <110> APPLICANT: Castrillon, Diego H.
6 <120> TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE
7 IMPROVED DIAGNOSIS OF GERM CELL TUMORS
11 <130> FILE REFERENCE: B0801/7195/ERP/KA
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/714,865
C--> 13 <141> CURRENT FILING DATE: 2000-11-16
13 <150> PRIOR APPLICATION NUMBER: U.S. 60/166,394
14 <151> PRIOR FILING DATE: 1999-11-18
16 <160> NUMBER OF SEQ ID NOS: 15
18 <170> SOFTWARE: FastSeq for Windows Version 3.0
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 2224
22 <212> TYPE: DNA
23 <213> ORGANISM: Homo Sapiens
25 <400> SEQUENCE: 1
26 acttgaagtc accatggggg atgaagattg ggaagcagaa atcaaccctc atatgtcttc 60
27 ctatgttccc atatttgaga aggataggta ttctggagaa aatggagaca attttaacag 120
28 gactccagct tcatcatcag aaatggatga tggaccttct cgaagagatc atttcatgaa 180
29 aagtggaattt gccctctgggc ggaatttttg aaacagagat gctggtgagt gtaataagcg 240
30 agataataca tccacaatgg gtggttttgg agttggaaag agt.tttggaa acagagggtt 300
31 ttcaaacagc aggtttgaag atgggtgatg ctctggtttc tggagagagt ctagttaatga 360
32 ctgcgaagat aatccaacac ggaacagagg gttttccaag agaggcggct atcgagatgg 420
33 aaataattca gaagcttcag ggccatacag aagaggtgga agaggtagtt tccgagggtg 480
34 ccgtggagga ttggtcttag gaagtccaaa taatgactta gaccagagcg aatgtatgca 540
35 gcgcactggg ggcctttttg gttctagaag accagtatta agtggcacag gtaatgggtg 600
36 tactttctca aycagaagtg gcagtggagg tgaacgaggt gggtacaaag gtttaaatga 660
37 agaagtaata acaggctctg gaaagaattc ttggaagtea gaagcagaag gaggagaaag 720
38 tagtgatact caaggaccaa aagtgaacct cataccacct cctccacctg aggatgagga 780
39 ctccatcttt gcacattatc agacaggcat aaacttcgac aaatacgaca ctattcttgt 840
40 ggaagtgtct ggacatgatg caccaccagc aattctgact ttggaagaag ctaatctctg 900
41 tcagacactg aataacaaca ttgctaaagc tggttatact aagcttactc ctgtgcaaaa 960
42 atacagtatt cctatcatac ttgcaggacg agatttgatg gct.tgtgctc aaacagggtc 1020
43 tgggaagact gcggcttttc tctaccaat tttggtcat atgatgcag atggaataac 1080
44 tgcagctcgt tttaaagagt tgcaggaaac agagtgtatt attgtagcac caactcgaga 1140
45 attggtcaac cagatttatt tggaagccag aaaattttct tttgggactt gtgtgaagagc 1200
46 tgttgttata tatgggggaa ccagctggg acattcaatt cgacaaatag tacaaggcty 1260
47 taatatatta tgtgtactc ctggaagact gatggatgc ataggcaag aaaagattgg 1320
48 tctcaaacag atcaataact tagttttgga tgaagctgat cgcattgttg atatgggttt 1380
49 tgggtccagaa atgaagaagt taatttcttg ccaggaatg ccatcaaagg aacagcgcca 1440
50 aacccttatg ttacagtcaa cttttccaga ggaatttcaa aggttggctg cagagtlttt 1500
51 aaagtcaaat tatctgtttg ttgctgttgg acaagtgggt ggagcatgta gagatgttca 1560
52 gcagaccgtt ctccaagttg gccagttctc aaaaagagaa aagctcgttg aaattctgcg 1620
53 aaacataggg gatgaagaa ctatggtctt tgttgaact aagaaaaaag cagattttac 1680
54 tgcaactltt ctltgtcaag aaaaaatgc aactacaagt atccatggtg atcgggaaca 1740
55 gagagagcgg gagcaagctc ttggagatgt tcgctttgga aagtgcaccg ttcttgttgc 1800
56 tacttcagta gctgccagag ggctggatat tgaaaatgtg caacatgtta tcaaltttga 1860
57 tcttctctct accattgatg aatatgttca tcgaattggg cgtactggtc gttgtgggaa 1920
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/714,865

DATE: 12/01/2000

TIME: 13:28:55

Input Set : A:\B8017195.txt

Output Set: N:\CRF3\12012000\I714865.raw

```

58 tactggcaga gcaatttcoct tttttgatct tgaatcggat aaccatttag cacagcctct 1980
59 agtaaaagta ttgacagatg ctcaacagga tgttcctgca tggttggaag aaattgcctt 2040
60 tagtacatac attcctggct tcagtggtag tacaagagga aacgtgtttg catcagttga 2100
61 taccagaaag ggcaagagca ctttgaacac agctgggttt tcttcttcac gagctcccaa 2160
62 tccagtagat gatgagtcac gggattaaag ccaaaacatc ctccaagtct gtgggtttga 2220
63 tgca 2224
65 <210> SEQ ID NO: 2
66 <211> LENGTH: 724
67 <212> TYPE: PRT
68 <213> ORGANISM: Homo Sapiens
70 <400> SEQUENCE: 2
71 Met Gly Asp Glu Asp Trp Glu Ala Glu Ile Asn Pro His Met Ser Ser
72 1 5 10 15
73 Tyr Val Pro Ile Phe Glu Lys Asp Arg Tyr Ser Gly Glu Asn Gly Asp
74 20 25 30
75 Asn Phe Asn Arg Thr Pro Ala Ser Ser Ser Glu Met Asp Asp Gly Pro
76 35 40 45
77 Ser Arg Arg Asp His Phe Met Lys Ser Gly Phe Ala Ser Gly Arg Asn
78 50 55 60
79 Phe Gly Asn Arg Asp Ala Gly Glu Cys Asn Lys Arg Asp Asn Thr Ser
80 65 70 75 80
81 Thr Met Gly Gly Phe Gly Val Gly Lys Ser Phe Gly Asn Arg Gly Phe
82 85 90 95
83 Ser Asn Ser Arg Phe Glu Asp Gly Asp Ser Ser Gly Phe Trp Arg Glu
84 100 105 110
85 Ser Ser Asn Asp Cys Glu Asp Asn Pro Thr Arg Asn Arg Gly Phe Ser
86 115 120 125
87 Lys Arg Gly Gly Tyr Arg Asp Gly Asn Asn Ser Glu Ala Ser Gly Pro
88 130 135 140
89 Tyr Arg Arg Gly Gly Arg Gly Ser Phe Arg Gly Cys Arg Gly Gly Phe
90 145 150 155 160
91 Gly Leu Gly Ser Pro Asn Asn Asp Leu Asp Pro Asp Glu Cys Met Gln
92 165 170 175
93 Arg Thr Gly Gly Leu Phe Gly Ser Arg Arg Pro Val Leu Ser Gly Thr
94 180 185 190
95 Gly Asn Gly Asp Thr Ser Gln Ser Arg Ser Gly Ser Gly Ser Glu Arg
96 195 200 205
97 Gly Gly Tyr Lys Gly Leu Asn Glu Glu Val Ile Thr Gly Ser Gly Lys
98 210 215 220
99 Asn Ser Trp Lys Ser Glu Ala Glu Gly Gly Glu Ser Ser Asp Thr Gln
100 225 230 235 240
101 Gly Pro Lys Val Thr Tyr Ile Pro Pro Pro Pro Glu Asp Glu Asp
102 245 250 255
103 Ser Ile Phe Ala His Tyr Gln Thr Gly Ile Asn Phe Asp Lys Tyr Asp
104 260 265 270
105 Thr Ile Leu Val Glu Val Ser Gly His Asp Ala Pro Pro Ala Ile Leu
106 275 280 285
107 Thr Phe Glu Glu Ala Asn Leu Cys Gln Thr Leu Asn Asn Ile Ala
108 290 295 300

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/714,865

DATE: 12/01/2000

TIME: 13:28:55

Input Set : A:\B8017195.txt

Output Set: N:\CRF3\12012000\I714865.raw

```

109 Lys Ala Gly Tyr Thr Lys Leu Thr Pro Val Gln Lys Tyr Ser Ile Pro
110 305 310 315 320
111 Ile Ile Leu Ala Gly Arg Asp Leu Met Ala Cys Ala Gln Thr Gly Ser
112 325 330 335
113 Gly Lys Thr Ala Ala Phe Leu Leu Pro Ile Leu Ala His Met Met His
114 340 345 350
115 Asp Gly Ile Thr Ala Ser Arg Phe Lys Glu Leu Gln Glu Pro Glu Cys
116 355 360 365
117 Ile Ile Val Ala Pro Thr Arg Glu Leu Val Asn Gln Ile Tyr Leu Glu
118 370 375 380
119 Ala Arg Lys Phe Ser Phe Gly Thr Cys Val Arg Ala Val Val Ile Tyr
120 385 390 395 400
121 Gly Gly Thr Gln Leu Gly His Ser Ile Arg Gln Ile Val Gln Gly Cys
122 405 410 415
123 Asn Ile Leu Cys Ala Thr Pro Gly Arg Leu Met Asp Ile Ile Gly Lys
124 420 425 430
125 Glu Lys Ile Gly Leu Lys Gln Ile Lys Tyr Leu Val Leu Asp Glu Ala
126 435 440 445
127 Asp Arg Met Leu Asp Met Gly Phe Gly Pro Glu Met Lys Lys Leu Ile
128 450 455 460
129 Ser Cys Pro Gly Met Pro Ser Lys Glu Gln Arg Gln Thr Leu Met Phe
130 465 470 475 480
131 Ser Ala Thr Phe Pro Glu Glu Ile Gln Arg Leu Ala Ala Glu Phe Leu
132 485 490 495
133 Lys Ser Asn Tyr Leu Phe Val Ala Val Gly Gln Val Gly Gly Ala Cys
134 500 505 510
135 Arg Asp Val Gln Gln Thr Val Leu Gln Val Gly Gln Phe Ser Lys Arg
136 515 520 525
137 Glu Lys Leu Val Glu Ile Leu Arg Asn Ile Gly Asp Glu Arg Thr Met
138 530 535 540
139 Val Phe Val Glu Thr Lys Lys Ala Asp Phe Thr Ala Thr Phe Leu
140 545 550 555 560
141 Cys Gln Glu Lys Ile Ser Thr Thr Ser Ile His Gly Asp Arg Glu Gln
142 565 570 575
143 Arg Glu Arg Glu Gln Ala Leu Gly Asp Phe Arg Phe Gly Lys Cys Pro
144 580 585 590
145 Val Leu Val Ala Thr Ser Val Ala Ala Arg Gly Leu Asp Ile Glu Asn
146 595 600 605
147 Val Gln His Val Ile Asn Phe Asp Leu Pro Ser Thr Ile Asp Glu Tyr
148 610 615 620
149 Val His Arg Ile Gly Arg Thr Gly Arg Cys Gly Asn Thr Gly Arg Ala
150 625 630 635 640
151 Ile Ser Phe Phe Asp Leu Glu Ser Asp Asn His Leu Ala Gln Pro Leu
152 645 650 655
153 Val Lys Val Leu Thr Asp Ala Gln Gln Asp Val Pro Ala Trp Leu Glu
154 660 665 670
155 Glu Ile Ala Phe Ser Thr Tyr Ile Pro Gly Phe Ser Gly Ser Thr Arg
156 675 680 685
157 Gly Asn Val Phe Ala Ser Val Asp Thr Arg Lys Gly Lys Ser Thr Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/714,865

DATE: 12/01/2000

TIME: 13:28:55

Input Set : A:\B8017195.txt

Output Set: N:\CRF3\12012000\I714865.raw

```

158      690      695      700
159 Asn Thr Ala Gly Phe Ser Ser Ser Arg Ala Pro Asn Pro Val Asp Asp
160 705      710      715      720
161 Glu Ser Trp Asp
164 <210> SEQ ID NO: 3
165 <211> LENGTH: 722
166 <212> TYPE: PRT
167 <213> ORGANISM: Mus Musculus
169 <400> SEQUENCE: 3
170 Met Gly Asp Glu Asp Trp Glu Ala Glu Ile Leu Lys Pro His Val Ser
171 1      5      10      15
172 Ser Tyr Val Pro Val Phe Glu Lys Asp Lys Tyr Ser Ser Gly Ala Asn
173      20      25      30
174 Gly Asp Thr Phe Asn Arg Thr Ser Ala Ser Ser Glu Met Glu Asp Gly
175      35      40      45
176 Pro Ser Gly Arg Asp Asp Phe Met Arg Ser Gly Phe Pro Ser Gly Arg
177 50      55      60
178 Ser Leu Gly Ser Arg Asp Ile Gly Glu Ser Ser Lys Lys Glu Asn Thr
179 65      70      75      80
180 Ser Thr Thr Gly Gly Phe Gly Arg Gly Lys Gly Phe Gly Asn Arg Gly
181      85      90      95
182 Phe Leu Asn Asn Lys Phe Glu Glu Gly Asp Ser Ser Gly Phe Trp Lys
183      100      105      110
184 Glu Ser Asn Asn Asp Cys Glu Asp Asn Gln Thr Arg Ser Arg Gly Phe
185      115      120      125
186 Ser Lys Arg Gly Gly Cys Gln Asp Gly Asn Asp Ser Glu Ala Ser Gly
187      130      135      140
188 Pro Phe Arg Arg Gly Gly Arg Gly Ser Phe Arg Gly Cys Arg Gly Gly
189      145      150      155      160
190 Phe Gly Leu Gly Arg Pro Asn Ser Glu Ser Asp Gln Asp Gln Gly Thr
191      165      170      175
192 Gln Cys Gly Gly Gly Phe Leu Val Leu Gly Lys Pro Ala Ala Ser Asp
193      180      185      190
194 Ser Gly Asn Gly Asp Thr Tyr Gln Ser Arg Ser Gly Ser Gly Arg Gly
195      195      200      205
196 Gly Tyr Lys Gly Leu Asn Glu Glu Val Val Thr Gly Ser Gly Lys Asn
197      210      215      220
198 Ser Trp Lys Ser Glu Thr Glu Gly Gly Glu Ser Ser Asp Ser Gln Gly
199      225      230      235      240
200 Pro Lys Val Thr Tyr Ile Pro Pro Pro Pro Pro Glu Asp Glu Asp Ser
201      245      250      255
202 Ile Phe Ala His Tyr Gln Thr Gly Ile Asn Phe Asp Lys Tyr Asp Thr
203      260      265      270
204 Ile Leu Val Glu Val Ser Gly His Asp Ala Pro Pro Ala Ile Leu Thr
205      275      280      285
206 Phe Glu Glu Ala Asn Leu Cys Gln Thr Leu Asn Asn Asn Ile Arg Lys
207      290      295      300
208 Ala Gly Tyr Thr Lys Leu Thr Pro Val Gln Lys Tyr Thr Ile Pro Ile
209      305      310      315      320

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/714,865

DATE: 12/01/2000

TIME: 13:28:55

Input Set : A:\B8017195.txt

Output Set: N:\CRF3\12012000\I714865.raw

```

210 Val Leu Ala Gly Arg Asp Leu Met Ala Cys Ala Gln Thr Gly Ser Gly
211           325           330           335
212 Lys Thr Ala Ala Phe Leu Leu Pro Ile Leu Ala His Met Met Arg Asp
213           340           345           350
214 Gly Ile Thr Ala Ser Arg Phe Lys Glu Leu Gln Glu Pro Glu Cys Ile
215           355           360           365
216 Ile Val Ala Pro Thr Arg Glu Leu Ile Asn Gln Ile Tyr Leu Glu Ala
217           370           375           380
218 Arg Lys Phe Ser Phe Gly Thr Cys Val Ile Ser Val Val Ile Tyr Gly
219           385           390           395           400
220 Gly Thr Gln Phe Gly His Ser Val Arg Gln Ile Val Gln Gly Cys Asn
221           405           410           415
222 Ile Leu Cys Ala Thr Pro Gly Arg Leu Met Asp Ile Ile Gly Lys Glu
223           420           425           430
224 Lys Ile Gly Leu Lys Gln Val Lys Tyr Leu Val Leu Asp Glu Ala Asp
225           435           440           445
226 Ser Met Leu Asp Met Gly Phe Ala Pro Glu Ile Lys Lys Leu Ile Ser
227           450           455           460
228 Cys Pro Gly Met Pro Ser Lys Glu Gln His Gln Thr Leu Leu Phe Ser
229           465           470           475           480
230 Ala Thr Phe Pro Glu Ile Gln Arg Leu Ala Gly Asp Phe Leu Lys
231           485           490           495
232 Ser Asn Tyr Leu Phe Val Ala Val Gly Gln Val Gly Gly Ala Cys Arg
233           500           505           510
234 Asp Val Gln Gln Thr Ile Leu Gln Val Gly Gln Tyr Gln Lys Glu Lys
235           515           520           525
236 Ser Leu Leu Arg Phe Tyr Glu Asn Ile Gly Asp Glu Arg Thr Met Val
237           530           535           540
238 Phe Val Glu Thr Lys Lys Lys Ala Asp Phe Ile Ala Thr Phe Leu Cys
239           545           550           555           560
240 Gln Glu Lys Ile Ser Ser Thr Ser Ile His Gly Asp Arg Glu Gln Arg
241           565           570           575
242 Glu Arg Glu Gln Ala Leu Gly Asp Phe Arg Cys Gly Lys Cys Pro Val
243           580           585           590
244 Leu Val Ala Thr Ser Val Ala Ala Arg Gly Leu Asp Ile Glu Asn Val
245           595           600           605
246 Gln His Val Ile Asn Phe Asp Leu Pro Ser Thr Ile Asp Glu Tyr Val
247           610           615           620
248 His Arg Ile Gly Arg Thr Gly Arg Cys Gly Asn Thr Gly Arg Ala Ile
249           625           630           635           640
250 Ser Phe Phe Asp Thr Asp Ser Asp Asn His Leu Ala Gln Pro Leu Val
251           645           650           655
252 Lys Val Leu Ser Asp Ala Gln Gln Asp Val Pro Ala Trp Leu Glu Glu
253           660           665           670
254 Ile Ala Phe Ser Thr Tyr Val Pro Pro Ser Phe Ser Ser Thr Arg
255           675           680           685
256 Gly Gly Ala Val Phe Ala Ser Val Asp Thr Arg Lys Asn Tyr Gln Gly
257           690           695           700
258 Lys Ala His Val Glu Tyr Ser Gly Asp Phe Phe Phe Thr Ser Ser Gln

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/714,865

DATE: 12/01/2000

TIME: 13:28:56

Input Set : A:\B8017195.txt

Output Set: N:\CRF3\12012000\I714865.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date